LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An arrangement for storing electrical energy comprising:

an electric charge source ~~(110; 410) adapted~~ operable to produce a DC-system voltage ~~(V_{TOT})~~ between a first terminal ~~(T1)~~ and a second terminal ~~(T2)~~,

a ~~number~~ plurality of electrical storage modules ~~(131, 132; 430A, 430B, 430C)~~ connected in series between the first terminal ~~(T1)~~ and the second terminal ~~(T2)~~, each electric storage module having a respective nominal module voltage; ~~and~~

a DC-to-DC converter ~~(120; 420)~~ coupled to the electric charge source ~~(110; 410)~~ and to each of the electrical storage modules ~~(131, 132; 430A, 430B, 430C)~~, the DC-to-DC converter being ~~adapted~~ operable to receive incoming power from the electric charge source ~~(110; 410)~~ and to deliver a respective voltage fraction ~~($V_{+}, V_{-}; V_{A}, V_{B}, V_{C}$)~~ of the DC-system voltage ~~(V_{TOT})~~ to each of the modules ~~(131, 132; 430A, 430B, 430C)~~, ~~characterized in that~~

wherein the DC-to-DC converter ~~(120; 420)~~ is ~~adapted~~ operable to control each of the voltage fractions ~~($V_{+}, V_{-}; V_{A}, V_{B}, V_{C}$)~~ to vary each fraction over time ~~(t)~~ within a voltage ~~an~~ interval ~~(V_{B})~~ around ~~a~~ the respective nominal module voltage of each module ~~($V_{1n}, V_{2n}; V_{An}, V_{Bn}, V_{Cn}$)~~.

2. (Currently Amended) An arrangement according to claim 1, wherein ~~characterized in that~~ the voltage interval ~~(V_{B})~~ represents a voltage variation of less than 25% of any of the nominal module voltages ~~($V_{1n}, V_{2n}; V_{An}, V_{Bn}, V_{Cn}$)~~.

3. (Currently Amended) An arrangement according to claim 1, wherein ~~any one of the preceding claims, characterized in that~~ the DC-to-DC converter ~~(120)~~ is operable ~~adapted~~ to control the respective voltage fractions ~~(V_{+}, V_{-})~~ over the electrical storage modules ~~(131, 132)~~ such that an average time interval ~~(t_{super1}, t_{super2})~~ during which the voltage fraction ~~(V_{+}, V_{-})~~ exceeds the nominal module voltage ~~(V_{1n}, V_{2n})~~ is

substantially equal with respect to all the modules (131, 132).

4. (Currently Amended) An arrangement according to ~~any one of the preceding claims, characterized in that~~ claim 1, wherein the DC-to-DC converter (120) is ~~adapted~~ operable to control the respective voltage fractions (V₁, V₂) over the electrical storage modules (131, 132) such that an average fraction of the DC-system voltage (V_TOT) being distributed to each module is substantially equally large for all the modules (131, 132).

5. (Currently Amended) An arrangement according to claim 1, wherein at least ~~any one of the preceding claims, characterized in that~~ two ~~or more~~ of the electrical storage modules (131, 132; 430A, 430B, 430C) are included in a common battery unit, the unit having a separate set of access points for each module, and each of the access points ~~being~~ is coupled to the DC-to-DC converter (120; 420).

6. (Currently Amended) An arrangement according to ~~any one of the preceding claims, characterized in that the number~~ claim 5, wherein there are two of electrical storage modules (131, 132) is equal to two.

7. (Currently Amended) An arrangement according to ~~any one of the preceding claims, characterized in that~~ claim 1, wherein the electrical storage modules (131, 132; 430A, 430B, 430C) are ~~adapted~~ operable to provide power to an electrical system of a vehicle via the first and second terminals (T1, T2).

8. (Currently Amended) An arrangement according to ~~any one of the preceding claims, characterized in that~~ claim 1, wherein the electric charge source (110; 410) is an electric generator.

9. (Currently Amended) A motor vehicle, ~~characterized in that it comprises~~

<u>comprising</u> an arrangement for storing electrical energy according to ~~any one of the claims 1 – 8~~ <u>claim 1</u>.

10. (Currently Amended) A method of charging a <u>plurality</u> ~~number~~ of electrical storage modules <u>comprising the steps of connecting the modules</u> ~~(131, 132; 430A, 430B, 430C) connected~~ in series between a first terminal ~~(T1)~~ and a second terminal<u>,</u> ~~(T2), comprising the steps of:~~

receiving a DC-system voltage ~~(V$_{TOT}$)~~ between the first terminal ~~(T1)~~ and the second terminal ~~(T2)~~,

DC-to-DC converting the DC-system voltage ~~(V$_{TOT}$)~~ into <u>a respective</u> ~~one~~ voltage fraction ~~(V$_1$, V$_2$; V$_A$, V$_B$, V$_C$)~~ per module<u>,</u> ~~(131, 132; 430A, 430B, 430C), and~~

delivering ~~the~~ <u>its</u> respective voltage fraction ~~(V$_1$, V$_2$; V$_A$, V$_B$, V$_C$)~~ to each of the modules ~~(131, 132; 430A, 430B, 430C)~~, <u>and</u>

~~characterized by the step of:~~

controlling each of the voltage fractions ~~(V$_1$, V$_2$; V$_A$, V$_B$, V$_C$)~~ to vary over time ~~(t)~~ within ~~an~~ <u>a voltage</u> interval (V$_D$) around a respective nominal module voltage ~~(V$_{1n}$, V$_{2n}$; V$_{An}$, V$_{Bn}$, V$_{Cn}$)~~.

11. (Currently Amended) A method according to claim 10, <u>wherein</u> ~~characterized by~~ the <u>voltage</u> interval ~~(V$_D$) representing~~ <u>represents</u> a voltage variation of less than 25% of any of the nominal module voltages ~~(V$_{1n}$, V$_{2n}$; V$_{An}$, V$_{Bn}$, V$_{Cn}$)~~.

12. (Currently Amended) A method according to ~~any one of the claims 10 or 11, characterized by~~ <u>claim 10, further comprising</u> controlling the respective voltage fractions ~~(V$_1$, V$_2$)~~ over the electrical storage modules ~~(131, 132)~~ such that an average <u>time</u> interval ~~(t$_{super1}$, t$_{super2}$)~~ during which the voltage fraction ~~(V$_1$, V$_2$)~~ exceeds the <u>respective</u> nominal module voltage ~~(V$_{1n}$, V$_{2n}$)~~ is substantially equal with respect to all the modules ~~(131, 132)~~.

13. (Currently Amended) A method according to ~~any one of the claims 10 - 12,~~ ~~characterized by~~ claim 10, further comprising controlling the respective voltage fractions ~~(V₊, V₂)~~ over the electrical storage modules ~~(131, 132)~~ such that an average fraction of the DC-system voltage ~~(V_TOT)~~ being distributed to each module is substantially equally large for all the modules ~~(131, 132)~~.

14. (Currently Amended) A method according to ~~any one of the claims 10 - 13,~~ ~~characterized by the number of~~ claim 10, wherein there are two electrical storage modules ~~(131, 132) being equal to two~~.

15. (Currently Amended) A computer program directly loadable into the internal memory of a computer, comprising software for controlling ~~the~~ steps ~~of any of the~~ ~~claims 10 - 14~~ when ~~said~~ the program is run on the computer, the steps being controlled comprising

receiving a DC-system voltage between the first terminal and the second terminal,

DC-to-DC converting the DC-system voltage into a respective voltage fraction per module;

delivering its respective voltage fraction to each of the modules, and

controlling each of the voltage fractions to vary over time within a voltage interval (V_D) around a respective nominal module voltage.

16. (Currently Amended) A computer readable medium, having the [[a]] program of claim 15 recorded thereon~~, where the program is to make a computer~~ ~~control the steps of any of the claims 10 - 14~~.

17. (New) An arrangement according to claim 1, wherein the DC-to-DC converter is operable to control the voltage fractions such that when one of the voltage fractions is varied to be above the respective module, another of the voltage fractions is varied to be below the respective normal module voltage for another respective module.

18. (New) A method according to claim 10, wherein each of the voltage fractions is controlled such that when one of the voltage fractions is varied to be above the respective module, another of the voltage fractions is varied to be below the respective normal module voltage for another respective module.